TSUNAMI RESPONSE PLAN

CITY OF SANTA BARBARA

2011 – FINAL DRAFT

City of Santa Barbara Office of Emergency Services
121 West Carrillo Street
Santa Barbara, CA 93101
805/564-5711
805/564-5730(fax)
www.SantaBarbaraCA.gov/OES

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INTRODUCTION

The phenomenon called "tsunami" is a series of ocean waves of extremely long length generated by undersea earthquakes, volcanic eruptions, or massive undersea landslides. Its speed depends upon the depth of the water and consequently the waves undergo accelerations or declarations in passing respectively over an ocean bottom of increasing or decreasing depth. By this process the direction of the wave propagation also changes, and the wave energy can become focused or defocused. In the deep ocean, tsunami waves can travel at speeds of 500 to 1,000 kilometers (km) per hour. Near the shore, however, a tsunami slows down to just few tens of kilometers per hour.

When the tsunami enters shallow coastal waters, its speed decreases and the wave height increases. This creates the large wave that becomes a threat to lives, property and the environment. Following the arrival of the first wave, subsequent waves may increase in height and arrive minutes to hours later. The 2004 Indonesian Tsunami caused over 300,000 deaths.

The relative threat for local tsunamis in California can be considered low due to low recurrence frequencies. Large, locally-generated tsunamis in California are estimated to occur once every 100 years. Thirteen possible tsunamis have been observed or recorded from local earthquakes between 1812 and 1988. There is no doubt that earthquakes occurring in the Santa Barbara area could generate large destructive local tsunamis and/or trigger underwater landslides capable of tsunami generation.

The areas most impacted by a Tsunami in the City of Santa Barbara would be southern areas of the city near the coast. Damage would depend on the local sea bottom and coastal topographic characteristics as well as incoming direction of the Tsunami

Residents and visitors to coastal areas must be aware that there may not be time or means to provide any warning of a tsunami threat. An earthquake felt along the coastline is a signal to move immediately to higher ground. This must be done if there is no information or any formal tsunami warning issued.

Any associated earthquake could also damage structures and infrastructure in the potential inundation area prior to the wave's arrival. This could significantly impact warning, evacuation and emergency response operations.

TSUNAMI CLASSIFICATION

Tsunamis have periods (the time for a single wave cycle) that may range from just a few minutes to as much as an hour or exceptionally more. At the shore, a tsunami can have a wide variety of expressions depending on the size and period of the waves, the near-shore bathymetry and shape of the coastline, the state of the tide, and other factors. In some cases a tsunami may only induce a relatively benign flooding of low-lying coastal areas,

coming onshore similar to a rapidly rising tide. In other cases it can come onshore as a bore - a vertical wall of turbulent water full of debris that can be very destructive. In most cases there is also a drawdown of sea level preceding crests of the tsunami waves that result in a receding of the waterline, sometimes by a kilometer or more. Strong and unusual ocean currents may also accompany even small tsunamis.

Damage and destruction from tsunamis is the direct result of three factors: inundation, wave impact on structures, and erosion. Deaths occur by drowning and physical impact or other trauma when people are caught in the turbulent, debris-laden tsunami waves. Strong tsunami-induced currents have led to the erosion of foundations and the collapse of bridges and seawalls. Floatation and drag forces have moved houses and overturned railroad cars. Tsunami associated wave forces have demolished frame buildings and other structures.

Considerable damage also is caused by floating debris, including boats, cars, and trees that become dangerous projectiles that may crash into buildings, piers, and other vehicles. Ships and port facilities have been damaged by surge action caused by even weak tsunamis. Fires resulting from oil spills or combustion from damaged ships in port, or from ruptured coastal oil storage and refinery facilities, can cause damage greater than that inflicted directly by the tsunami. Other secondary damage can result from sewage and chemical pollution following the destruction. Damage of intake, discharge, and storage facilities also can present dangerous problems. Of increasing concern is the potential effect of tsunami drawdown, when receding waters uncover cooling water intakes associated with nuclear plants.

TSUNAMI BULLETINS

When major earthquakes occurring in the Pacific Rim have magnitudes large enough to warrant concern..., NOAA's Pacific Tsunami Warning Center (PTWC) will notify authorities and others through advisory messages. These messages are information bulletins, warnings or watches. In any case the message will be posted at the PTWC Web site. The type of messages will depend on the situation as interpreted initially from seismic data:

Tsunami Information Bulletin-- At this time, though a threat exists, there is no evidence that a tsunami is making its way across the Pacific.

Tsunami Warning-- PTWC finds conditions serious enough to issue immediate concern to parts of the Pacific. The message will include approximate arrival times for various parts of the Pacific.

Tsunami Watch-- PTWC has determined the earthquake may very likely have created a tsunami and is advising parties to be alert as PTWC awaits tide data to support tsunami generation.

Tsunami Warning / Watch / Advisory Warnings issued by the National Weather Services tsunami warning centers are alphanumeric products providing tsunami warning, watch and

advisory warning information for potentially damaging tsunamis. The centers operational objectives are to: a) locate and size major earthquakes in the Pacific basin, b) determine their tsunamigenic potential, c) predict tsunami wave arrival times and, when possible, run-up on the coast, and d) provide timely and effective tsunami information and warnings to the population of the Pacific to reduce the hazards of tsunamis, especially to human life.

These bulletins are prepared by each of two Tsunami Warning Centers. The West Coast/Alaska Tsunami Warning Center (WC/ATWC), located at Palmer, Alaska, issues tsunami bulletins to its Area of Responsibility (AOR) that is Alaska, British Columbia, Washington, Oregon, and California. It also has the primary responsibility for the detection, location, and magnitude determination of magnitude of potentially tsunamigenic earthquakes occurring in its AOR. The Richard H. Hagemeyer Pacific Tsunami Warning Center (PTWC), located at Ewa Beach, Oahu, Hawaii, has the responsibility for issuing tsunami bulletins to its AOR that includes Hawaii, all other U.S. interests in the Pacific, and most other countries within the Pacific and around its rim. It has the primary responsibility for the detection, location, and magnitude determination of magnitudes for potentially tsunamigenic earthquakes occurring anywhere in the Pacific Basin outside the WC/ATWC AOR.

Pacific-wide Tsunami Warning. A Pacific-wide tsunami warning bulletin is issued by the PTWC after confirmation has been received that a tsunami has been generated in the Pacific that has caused damage, or has the potential to cause damage, at distances greater than 1000 kilometers from the epicenter, and thus poses a widespread threat to any populated coastal area within the Pacific Basin. Subsequent bulletins are issued at least hourly or as conditions warrant to reiterate the threat and to provide sea level gauge readings and other reports of tsunami wave activity. When significant wave activity has subsided, a warning cancellation is issued.

Regional Tsunami Warning. A regional tsunami warning bulletin is a tsunami warning issued initially to coastal areas near the earthquake epicenter. It is usually based only on seismic information without tsunami confirmation, and is initially issued as a means of providing the earliest possible alert of a potentially destructive tsunami to the population near the epicentral area of a potentially tsunamigenic earthquake. Areas in a regional tsunami warning are generally less than three hours from the estimated tsunami arrival time. A list of estimated arrival times for warning areas is provided in the bulletin. This condition implies that all coastal areas in the region should be prepared for imminent flooding. Subsequent bulletins are issued at least hourly or as conditions warrant to continue the warning, to expand or restrict the warning area, or to end the warning. A regional tsunami watch and advisory may also be issued in the same bulletin.

Urgent Local Tsunami Warning. An urgent local tsunami warning is a tsunami warning issued by the PTWC to Hawaii for tsunamis generated in Hawaiian coastal waters. It may be based only on seismic information without tsunami confirmation, or on a combination of seismic and sea level data, and is issued as a means of providing the earliest possible alert of a potentially destructive local tsunami. Areas in an urgent local tsunami warning may have only minutes or seconds before tsunami waves arrive, so urgent action is

required to save lives. Subsequent bulletins are issued as conditions warrant continuing the warning, to expand or restrict the warning area, or to end the warning.

Final Warning Supplement. A final warning supplement bulletin is issued following a damaging or potentially damaging tsunami within a Centers AOR that may pose a continuing threat. A final warning supplement bulletin provides guidance to local officials on when they can consider the threat to have passed based on their local tsunami conditions. The cancellation or all clear decision must be made locally.

Warning Cancellation. A warning cancellation is issued as the final bulletin indicating when there is no longer the threat of a damaging tsunami to a Centers AOR. A cancellation is usually issued after an evaluation of sea level data confirms that a destructive tsunami will not impact the AOR. It may also be issued following a destructive tsunami when data indicate that the threat has largely subsided to non-destructive levels. In that case, it provides guidance to local officials regarding when they can consider the threat to have passed based on their local tsunami conditions. The all clear decision must be made locally.

Regional Tsunami Watch. A regional tsunami watch is a tsunami watch issued in conjunction with a regional tsunami warning to coastal areas near the earthquake epicenter, but outside the warning area. It is usually based only on seismic information without tsunami confirmation, and is issued as a means of providing the earliest possible alert of a potentially destructive tsunami. Areas in a regional tsunami watch are generally less than six hours from the estimated tsunami arrival time, and a list of estimated arrival times for watch areas is provided in the bulletin. Subsequent bulletins are issued at least hourly or as conditions warrant to continue the warning and watch, to expand or restrict the warning and watch areas, to upgrade the watch to a warning, or to end the warning and watch. A regional tsunami warning and advisory may also be issued in the same bulletin. The bulletin, usually based only on seismic information without tsunami confirmation, is issued as a means of alerting the population within 1 to 3 hours travel time beyond the tsunami warning area of an earthquake with the potential to have generated a tsunami that may affect that area. Subsequent bulletins are issued at least hourly or as conditions warrant expanding the watch area, upgrade it to a warning, or end the watch and warning. A Regional Tsunami Watch may be included in the text of the message that disseminates a Regional Tsunami Warning.

Tsunami Advisory Bulletin. A tsunami advisory bulletin is issued to areas not currently in either warning or watch status when a tsunami warning has been issued for another region of the Pacific. An Advisory indicates that an area is either outside the current warning and watch regions or that the tsunami poses no danger to that area. The Center(s) issuing the Advisory will continue to monitor the event, issuing updates at least hourly. As conditions warrant, the Advisory will either be continued, upgraded to a watch or warning, or ended.

Tsunami Information Bulletin. A tsunami information bulletin is issued for informational purposes for events that will not cause a destructive tsunami but were large enough in size to have been detected by the tsunami warning centers seismic monitoring networks. Some

of these earthquakes may have been large enough, however, to cause earthquake-related damage.

SPECIAL SITUATION

The City of Santa Barbara is located on or near several offshore geological faults that have been active in the past and can subject the entire area to seismic action at any time. The more prominent of these are the Mesa Fault, the Santa Ynez Fault in the mountains, and the Santa Rosa Fault and other unnamed faults in the offshore area of the Channel Islands. (See Attachment A – page 20)

The City is also open to Tsunami action from the Pacific Ocean area, particularly the vicinity of the Aleutian Islands, Kurile Islands, etc., which are normally very active. There is no recent Tsunami history in Santa Barbara generated from other areas of the Pacific Ocean, but there was substantial tidal action in Santa Monica, Port Hueneme, and Crescent City, California, from an earthquake off the coast of Chile on May 22, 1960. The maximum rise or fall in the 1960 Tsunami at the above cities was 9.1 ft., 8.8 ft. and 10.9 ft., respectively.

A Tsunami is reported to have occurred at Santa Barbara on December 21, 1812, but no accurate figures are available on the actual height of the wave. Probably the most accurate study available is that made by Marine Advisors, Inc., of La Jolla, California, for the Southern California Edison Company on the occasion of the building of the San Onofre Nuclear Generating Station. Their studies indicated that a quoted 35 foot wave in Santa Barbara on December 21, 1812, was probably no greater than 15 to 20 ft. at the most.

The Channel Islands lie approximately 30 miles offshore from the City of Santa Barbara, and run parallel to the coastline. The islands would most likely provide insignificant shielding from tsunamis, although this would depend on many variables (where the tsunami earthquake was generated, how strong it was, etc.)

PURPOSE

The purpose of this plan is to provide information and guidance specific to receiving information that a tsunami watch or warning is in effect. This plan is meant to “fill the gap” between the time a watch or warning is received and the time when the watch or warning is determined to be credible or not. The overall emergency management concepts, policies, and procedures contained in the City’s Emergency Operations Plan and individual departmental standard operating procedures (SOP’s) remain in place.

ASSUMPTIONS

This plan is based on the following assumptions:

- The tsunami threat in Santa Barbara can be due to both distant-source as well as local-source events.
- For a local-source tsunami warning, the West Coast/Alaska Tsunami Warning Center will not modify or cancel the warning in less than 60 minutes for the initial notification. For distant-source tsunami events, the West Coast/Alaska Tsunami Warning Center will issue updates at least every hour.
- Any Warning or Watch issued by the West Coast/Alaska Tsunami Warning Center may reach the general public prior to the information being received by public safety/emergency management via official channels. (See Information Flow Chart, Attachment C, page 22)
- The City of Santa Barbara Combined Communication Center will receive Watch and Warning information via CLETS (California Law Enforcement Telecommunications System).
- For most events the National Tsunami Warning Center may take up to 10 minutes to develop and deliver a warning message via CLETS or the California Warning and Alert System (CALWAS). It may also take the National Weather Service 15 minutes to activate the Emergency Alert System. This could delay initial response by safety agencies for up to 30 minutes.
- Arrangement for vulnerable population will be made by the Incident Commanders at the site and needed resources will be requested through the Emergency Operations Center.
- A Tsunami Warning may attract sightseers to the inundation Hazard Areas. Members of the public outside the inundation Risk Area may seek to enter in order to check on family members or assist them in evacuating.
- After the arrival of the first wave, waves may continue to arrive at intervals for several hours. At the Incident Commanders discretion the risk areas may reopen to the public once the area has been surveyed for safety.
- The first wave may not be the largest. The largest wave usually occurs within the first ten waves.
- Intervals between successive major waves may be dissimilar. There is no regular period of time between successive waves.
- The maximum wave height inside the Santa Barbara Channel cannot be estimated at this time.
- The (temporary) Tsunami Inundation Risk Area map (updated map is currently being developed) shows the maximum probably potential inundation – actual events could produce more or less inundation.
- Media interest will be significant for any Tsunami Warning or Watch. Media coverage and Emergency Alert System messages may cause the public to call 911 or other emergency numbers for more information.
- Heavy use of telephones by the public may impact the ability of public safety agencies to communicate and warn the public. The City of Santa Barbara Combined Communications will be significantly impacted.

- The coordination and response actions from involved agencies and jurisdictions shall follow the City of Santa Barbara Emergency Operations Plan (EOP) and the departments Standard Operating Procedures (SOP).
- Within the inundation Risk Area special institutions such as schools, hospitals, and nursing homes will be identified. Special procedures for warning, evacuating, and care for the occupants will be determined by the incident commander.

CONCEPT OF OPERATIONS

In the event of a Tsunami Watch or Warning, any party receiving such information, from whatever source, must confirm that all first response parties have received the Watch or Warning. These include (but are not limited to): Police Watch Commander, Fire Battalion Chief, Harbor Patrol, Airport Patrol, City Administrator, Emergency Services Manager, Police Records and Combined Communications Center.

Initial Incident Command will be the responsibility of the on-duty Police Watch Commander and the on-duty Fire Battalion Chief, employing Unified Command. Unified Incident Commanders shall be responsible for making initial notifications, determining if a credible threat exists, and taking appropriate actions relative to that determination.

Upon determination of credibility the City Administrator and Emergency Services Manager will be notified. Warning and evacuation will not be delayed by information gathering or threat assessment.

ACTIVATION

This plan becomes effective upon notification of a Tsunami Watch or Warning issued by the National Weather Service Tsunami Warning Center, State's Warning Center, or on order of the City of Santa Barbara Director of Emergency Services.

PUBLIC WARNING

In the event of a Tsunami Warning, population in the designated tsunami inundation hazard areas will be warned and advised to evacuate to higher ground or safe zone areas. The public will be instructed to move by the quickest method available; in many cases individuals should walk and not drive inland. The expected arrival time of the tsunami will also be provided, if available. After warning the general public, alerting and moving populations at beaches, schools or convalescent care facilities will have the highest priority. Members of the public may receive warnings directly via the Reverse 911 System, Emergency Alert System (EAS) or the NOAA Weather Radio network.

COMMAND AND CONTROL

For the purposes of coordinating emergency evacuation and rescue operations, initial field responders will use the Incident Command System (ICS). An Incident Command Post and

staging areas will be determined by Unified Command with information relayed to the Emergency Operations Center.

Proposed Evacuation Routes and Traffic Control Points

Law enforcement will be responsible for evacuations with the assistance of other departments as directed by Unified Command. Proposed evacuation routes are one-way traffic on the main thoroughfares that run from the coastal area to the cold zone area above Carrillo Street. (See Proposed Evacuation Map, Attachment B, Page XX) Proposed evacuation routes are as follows:

- One-way traffic on Castillo, Garden, Cesar Chavez and Milpas Streets; leaving one lane open for first responders
- Route Cabrillo Blvd traffic west to La Marina and east to Hot Springs Road

Traffic Control Points are as follows:

- Shoreline Dr. at La Marina
- Cabrillo Blvd. at Hwy 101
- Castillo at Montecito
- State at Gutierrez
- Garden at Gutierrez
- Salsipuedes @ Calle Cesar Chavez
- Milpas at Quinientos Street
- Cliff Dr. at Loma Alta

A Task Force Staging Area will be located at the Public Works Yards at 630 Garden Street. Personnel and Equipment evacuated to this area will be directed by Supervisor to wait until the “All Clear” as been declared. No personnel or equipment will be allowed into the inundation zone until a Hazardous Materials sweep has been conducted by the Hazardous Material Teams.

Proposed Unified Command Post will be located on the West Campus of Santa Barbara City College, 735 Cliff Drive.

PUBLIC SAFETY AGENCY RE-ENTRY POLICY

Tsunamis may produce several waves with subsequent waves larger than the first. Therefore, it is the policy of the City of Santa Barbara that once public safety personnel and equipments have evacuated the Tsunami Hazard Inundation Area, they will not re-enter the area until the “All Clear” message is transmitted by the Combined Communications Center and at the discretion of the Incident Commander. The “All Clear” will be transmitted two hours after the last tsunami wave has arrived or upon receipt of a tsunami warning cancellation from the California State Warning Center.

"ALL CLEAR" WARNING CANCELLATION NOTIFICATION

A warning cancellation is issued as the final bulletin indicating when there is no longer the threat of a damaging tsunami to a Centers Area of Responsibility (AOR). A cancellation is usually issued after an evaluation of sea level data confirms that a destructive tsunami will not impact the AOR. It may also be issued following a destructive tsunami when data indicate that the threat has largely subsided to non-destructive levels. In that case, it provides guidance to local officials regarding when they can consider the threat to have passed based on their local tsunami conditions. The all clear decision must be made locally.

The responsibility of issuing an "All Clear" notification rests with the Unified Command. Evacuated areas must remain closed to the public. The decision to allow re-entry will be made by Unified Command, controlling access so as to ensure that safety and sanitary precautions are provided for.

SEARCH AND RESCUE

Following evacuation emergency response assets will stage outside the hazard area until the "All Clear" is sounded. Prior to entering the Hazard Area, communications equipment and assignments will be allocated to and coordinated within each branch. Entry into the inundation area will be in phases; as decided by Unified Command.

The initial incident objectives would include (not necessarily in this order):

Windshield survey by First Responders, preferably HazMat team
Identify and Isolate Hazards
Conduct Security Operations
Conduct Search and Rescue
Conduct Recovery Operations

DAMAGE ASSESSMENT UNIT

The Damage Assessment Unit will coordinate all damage assessment teams from the Community Development Building and Safety Department Operating Center. Information will be forwarded to the Emergency Operations Center and Incident Commander via fax, telephone, e-mail or runners.

EMERGENCY PUBLIC INFORMATION

The Public Information Officer (PIO) will coordinate all public information activities with the Director of Emergency Services and the Incident Commander. The PIO may recommend establishing a Joint Information Center (JIC) at the recommendation of the Incident Commander and Director of Emergency Services.

ROLES AND RESPONSIBILITIES

INITIAL PHASE

Combined Communications Center

- Advise Watch Commander of Watch/Warning
- Advise Battalion Chief of Watch/Warning
- Advise Harbor Patrol of Watch/Warning
- Advise Airport Patrol of Watch/Warning
- Advise Police Records of Watch/Warning
- Advise all field personnel of warning and initial recommendations
- Advise 911 callers regarding initial recommendations (Initial default recommendation – "The City is determining the credibility of the watch/warning. We are making no recommendations at this time."

Police Records

- Advise Combined Communications Center of Watch/Warning
- Advise incoming callers regarding initial recommendations (Initial default recommendation – "The City is determining the credibility of the watch/warning. We are making no recommendations at this time."

Police Watch Commander

- Advise Chief, via chain of command
- Advise Combined Communications Center of Watch/Warning
- Advise field personnel regarding immediate duties including whether to implement Unusual Occurrence Manual protocols
- Revise "Initial default recommendation" if appropriate, advise CCC and Records
- Contact City Administrator and Emergency Services Manager, advise of Watch/Warning
- Meet with on-duty Battalion Chief to establish Unified Command (Consider including on-duty ranking Harbor Patrol Officer and Public Works)

Fire Battalion Chief

- Advise Combined Communications Center of Watch/Warning
- Advise Fire Chief or Deputy Chief of Watch/Warning
- Meet with on-duty Watch Commander to establish Unified Incident Command

Emergency Services Manager

- Advise City Administrator of Watch/Warning
- Determine EOC staffing levels, if appropriate
- Contact City PIO and coordinate updates via media
- Contact Operational Area on City Status
- Make sure that RIMS is started

Public Information Officer

- Advise City PIO staff of watch/warning
- Begin to script advisory/warning information
- Stay in contact with Emergency Services Manager and Emergency Services Director

OPERATIONAL PHASE

Unified Command (Law/Fire/Public Works/Harbor/Airport)

- Determine credibility of Watch/Warning
- Develop initial action plan based on information, set objectives

Emergency Services Manager

- Update and assist Unified Incident Commanders: as appropriate
- Update City Administrator
- Update Executive Management
- Update PIO
- Update Operational Area

If Watch/Warning is determined NOT credible.

Unified Incident Commanders

- Advise the following of "All Clear" status, Watch/Warning is cancelled"
    - Combined Communications Center
    - Police Records
    - Field Personnel (Fire and Police)
    - Harbor Patrol
    - Airport Patrol/Administration
    - Emergency Services Manager

Emergency Services Manager

- Advise City Administrator
- Advise EOC personnel/Executive Management
- Liaison with PIO to deliver immediate news release on all clear status

Public Information Officer

- Advise PIO staff of all clear status
- Be prepared to put out a statement to the press; once approved by the Incident Commander

If Watch/Warning is deemed CREDIBLE

Unified Command

- Develop initial action plan
- Establish priorities (Including Calls-for-Service prioritization for Combined Communications Center)

- Determine message for incoming 911 callers; advise Combined Communications Center and Police Records
- Advise the following of credible threat, initial action plans and update as necessary:
    - City Administrator
    - Emergency Services Manager
    - Combined Communications Center
    - Police Records
    - Field Personnel (Fire and Police)
    - Harbor Patrol
    - Airport Patrol/Administration
- Assign field personnel accordingly for traffic control and evacuation
- Determine if Reverse 911 is to use be utilized and contact County Sheriff's Dispatch
- Request activation of the Emergency Operations Center (EOC) to the City Administrator or designee
- Recall off-duty personnel as needed
- Appoint/contact Public Information Officer

Emergency Services Manager

- Assist in credibility assessment of the watch/warning,
- At the direction of the City Administrator Activate EOC
- Recall EOC Section Coordinators
- Contact Operational Area; advise of EOC activation
- Ensure for accurate media updates with PIO and Incident Commanders.
- Advise Executive Management
- Assist City Administrator in proclaiming a local emergency (See Section 3 in the City's Emergency Operations Plan)

Combined Communications Center

- Receive and relay the tsunami watch/warning information to Unified Incident Commanders
- Advise 911 callers if an evacuation is recommended/required per Unified Incident Command direction
- Prioritize Calls-for-Service as directed by Unified Incident Commanders
- Assist in contacting Sheriff's dispatch if Reverse 911 system is to be used.
- Consider holding over and calling back staff
- On termination of incident, notify emergency responders and 911 callers

Fire

- Serve as Initial Incident Commander in Unified Command
- Move and stage resources outside the Tsunami Inundation Zone
- Stage and deploy USAR and HazMat team as needed
- Provide emergency medical treatment

- Assist in notification as requested
- Request fire mutual aid as required
- Consider holding over and calling back staff
- Staff EOC as required

Harbor Patrol

- Assist Unified Incident Commanders as requested
- Move resources out of the Tsunami Inundation Zone and/or to deep water
- Assist in notification as directed by Unified Incident Commanders
- Coordinate scene security/evacuation/crowd control as directed by Unified Incident Commanders
- Assist in dissemination of update information
- Respond as required

Police

- Serve as Initial Incident Commander in Unified Command
- Implement appropriated sections of Unusual Occurrence Manual
- Move and stage resources outside the Tsunami Inundation Zone
- Direct Evacuation
- Coordinate scene security, crowd control, traffic control
- Request law enforcement mutual aid as required
- Consider holding over and calling back staff
- Staff EOC as required
- Respond as required

Public Works

- Support perimeter and traffic control efforts
- Request mutual aid as necessary
- Consider holding over and calling back staff
- Coordinate and render safe, repair, and restore City utility facilities
- Coordinate Debris Management
- Respond as required
- If requested, activate the Public Works Department Operating Center

Public Information Officer

- Advise PIO staff of creditability
- Be prepared to open the Media Center as requested by the Director of Emergency Services
- Make contact with media and set up media briefings and prepare scripts for elected officials and Executive Management
- Prepare information packets for city employees
- Be prepared to put out a statement to the press; once approved by the Incident Commander

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City of Santa Barbara Emergency Operations Plan, November 2007

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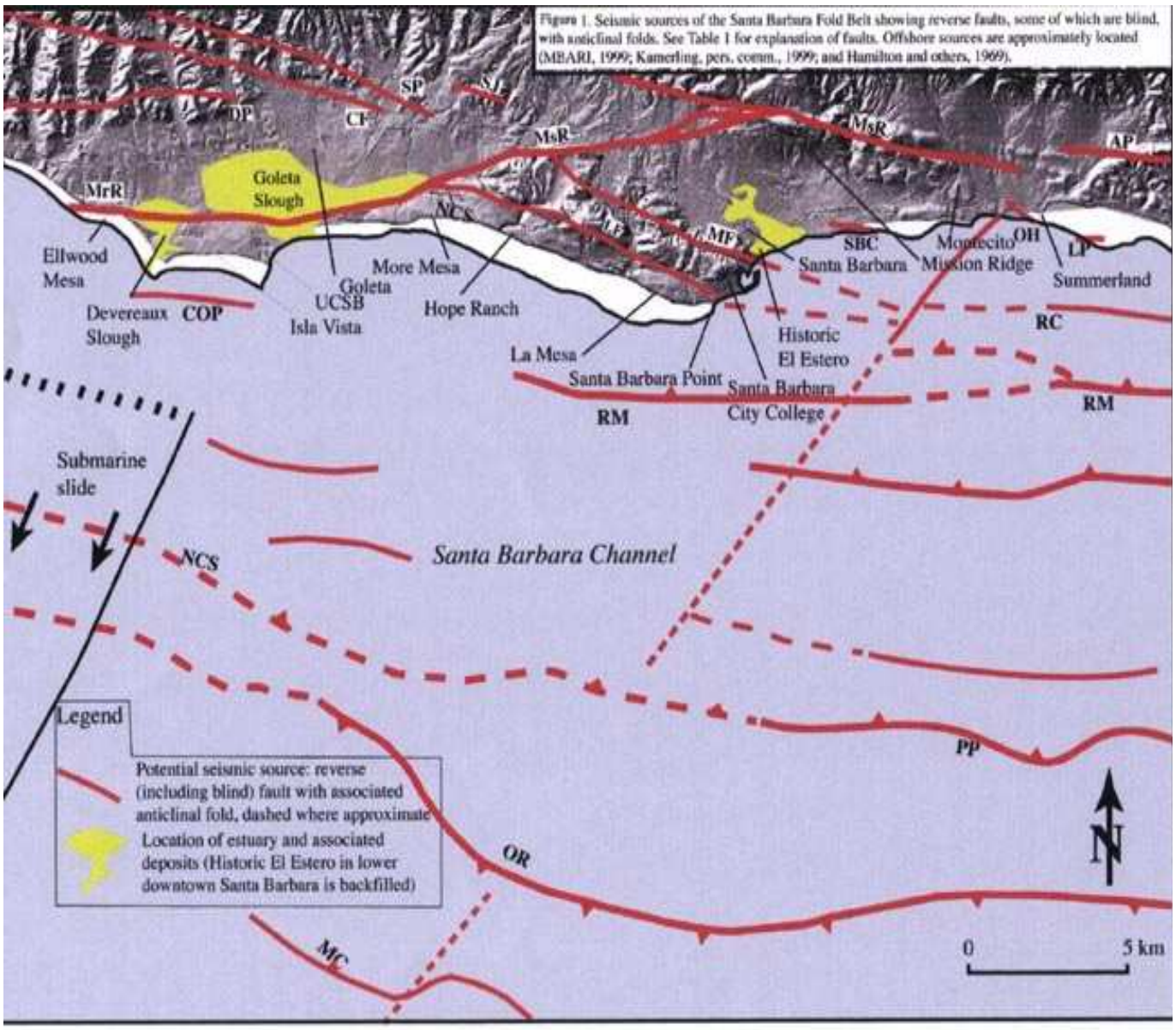
Attachment A

EARTHQUAKE HAZARDS OF THE SANTA BARBARA FOLD BELT



Fault map from "Earthquake Hazard of the Santa Barbara Fold Belt, California"
by E.A. Gurrola and E.A. Keller, June 1999
Institute for Crustal Studies, University of California at Santa Barbara

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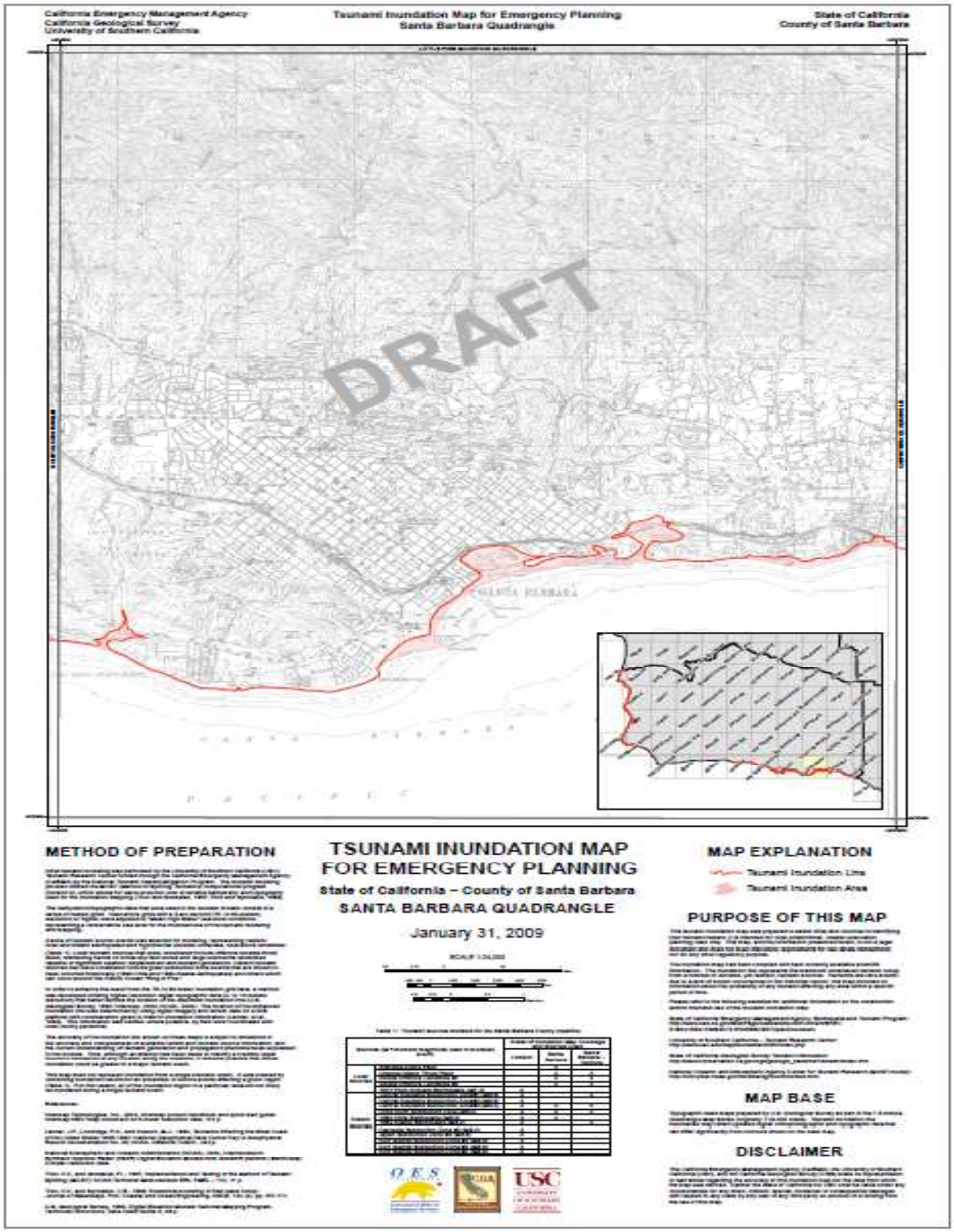
Attachment B

CITY OF SANTA BARBARA INUNDATION MAP



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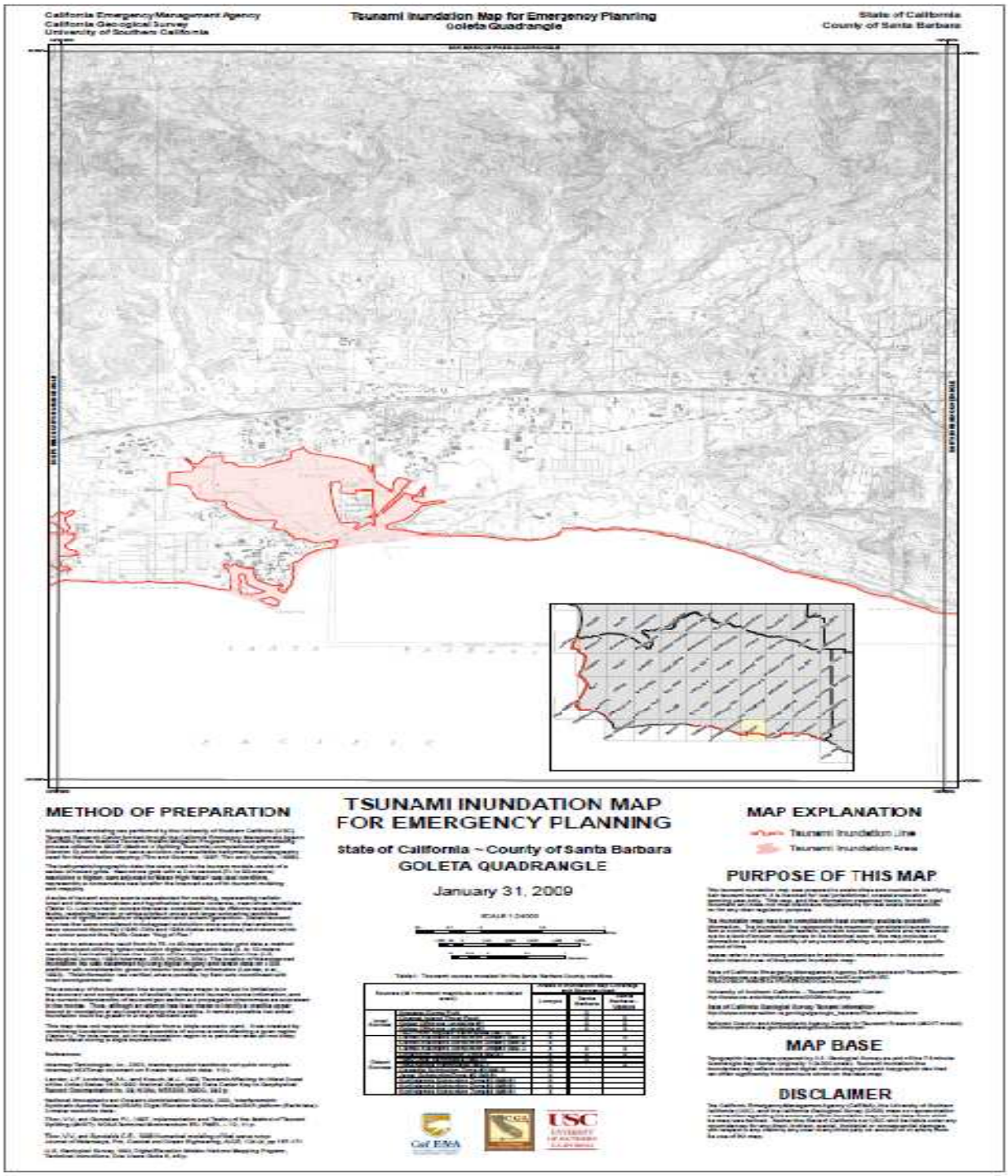
Attachment C

CITY OF SANTA BARBARA AIRPORT INUNDATION MAP



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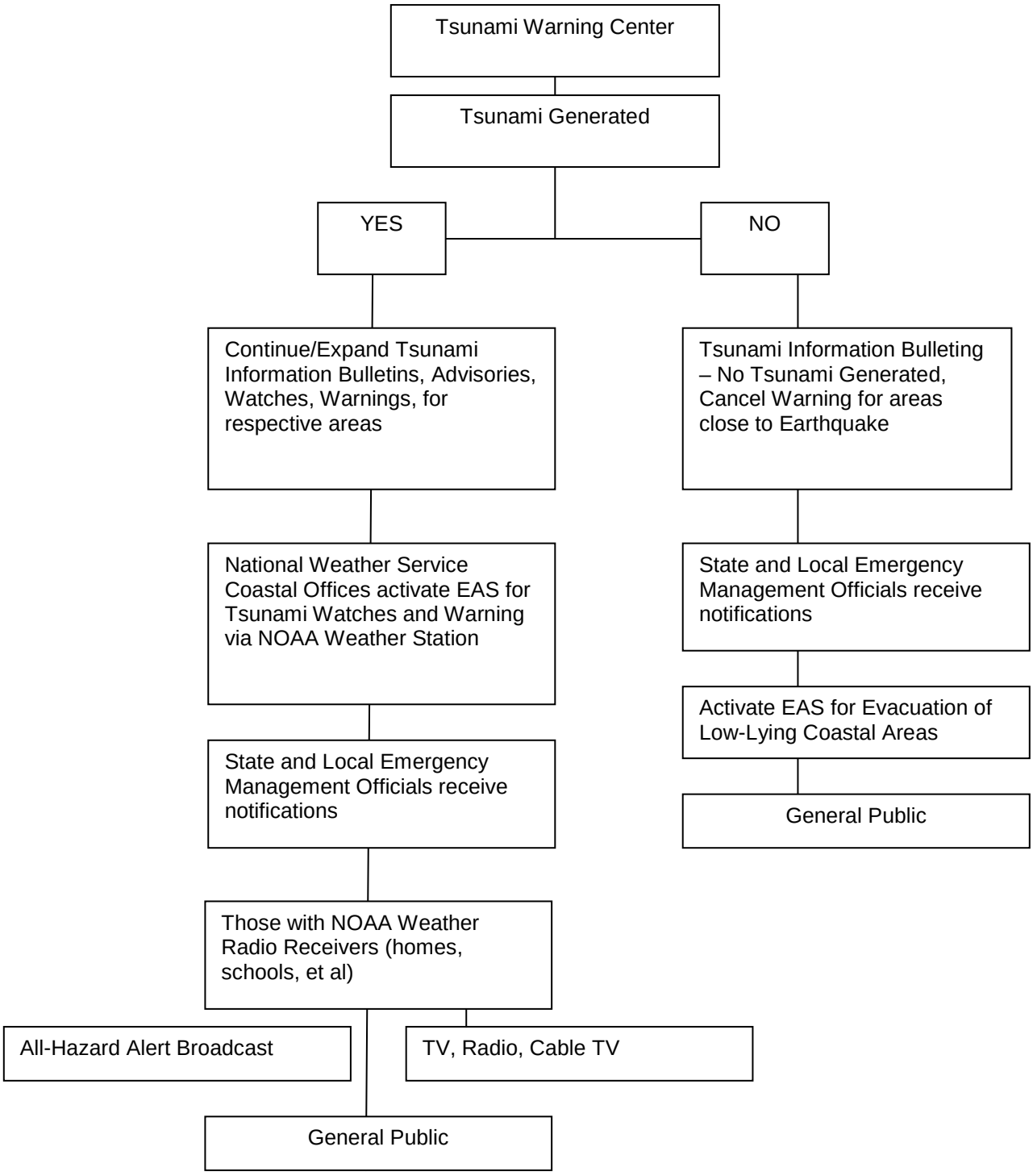
Attachment D

Tsunami Communications Flowchart



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